

IN THE CLAIMS

1. (Previously Presented) An isolated nucleic acid molecule comprising:
a sequence of nucleotides encoding an adenovirus tripartite leader (TPL), wherein the TPL-encoding sequence of nucleotides comprises: (a) first and second different TPL exons, wherein the different TPL exons are from different adenoviruses, (b) an intron between exons of said TPL, or (c) first, second and third same or different TPL exons, wherein:

at least two of the different TPL exons are from different adenoviruses; and

said TPL exons are selected from the group consisting of complete TPL exon 1, complete TPL exon 2 and complete TPL exon 3.

2-3. (Cancelled).

4. (Previously Presented) The isolated nucleic acid molecule of Claim 1, wherein said intron is native adenovirus intron 1.

5. (Currently Amended) The isolated nucleic acid molecule of Claim 1, wherein one of said TPL nucleotide sequence [[is]] comprises the sequence set forth in SEQ ID NO: 32.

6. (Previously Presented) An isolated nucleic acid molecule of Claim 1, further comprising a promoter and a sequence of nucleotides that encodes an adenoviral structural protein, operatively linked to said promoter and said TPL-encoding sequence of nucleotides.

7. (Previously Presented) The isolated nucleic acid molecule of Claim 6, wherein said adenoviral structural protein is a fiber protein or a chimeric protein which includes an adenovirus fiber protein tail domain.

8. (Previously Presented) The isolated nucleic acid molecule of Claim 7, wherein said chimeric protein comprises an Ad3 head domain and an Ad5 tail domain or an Ad5 head domain and an Ad3 tail domain.

9. (Cancelled).

10. (Currently Amended) ~~[[The]]~~ An isolated nucleic acid molecule ~~of Claim 1,~~
~~wherein said molecule has~~ comprising a nucleotide sequence selected from the group
consisting of pDV60 (SEQ ID NO: 43), pDV67 (SEQ ID NO: 44), pDV69 (SEQ ID NO: 47),
pDV80 (SEQ ID NO: 64) and pDV90 (SEQ ID NO: 65).

11. (Original) An adenovirus vector complementing plasmid comprising an isolated
nucleic acid molecule according to Claim 1.

12-13. (Cancelled).

14. (Previously Presented) An adenovirus vector packaging cell line, comprising:

i) a stably integrated nucleic acid molecule, comprising an adenovirus tripartite
leader (TPL) nucleotide sequence, said TPL sequence comprising complete TPL exon 1
having the nucleotide sequence of SEQ ID NO: 32 or partial TPL exon 1 having the
nucleotide of SEQ ID NO: 26; and

ii) an operatively-linked promoter and a nucleic acid sequence that encodes an
adenovirus structural protein, wherein the sequence of nucleotides that encodes the TPL
comprises a first TPL exon operatively linked to a complete second TPL exon operatively
linked to a complete third TPL exon.

15. (Previously Presented) The cell line of Claim 14, wherein said promoter is an
inducible promoter.

16. (Previously Presented) The cell line of Claim 14, wherein said adenovirus
structural protein is adenovirus fiber protein or a chimeric protein which includes an
adenovirus fiber protein tail domain.

17. (Previously Presented) The cell line of Claim 16, wherein said chimeric protein
comprises an Ad3 head domain and an Ad5 tail domain or an Ad5 head domain and an Ad3
tail domain.

18. (Previously Presented) The cell line of Claim 14, wherein said nucleic acid molecule is selected from the group consisting of pDV60 (SEQ ID NO: 43), pDV67 (SEQ ID NO: 44), pDV69 (SEQ ID NO: 47), pDV80 (SEQ ID NO: 64) and pDV90 (SEQ ID NO: 65).

19. (Cancelled).

20. (Previously Presented) The cell line of Claim 14, wherein said cell line is an epithelial cell line.

21. (Previously Presented) The cell line of Claim 14, wherein said cell line supports the production of a recombinant adenovirus vector genome by complementation of a deficient viral gene in said vector genome.

22. (Previously Presented) The cell line of Claim 21, wherein said cell line expresses an adenovirus early protein gene and a fiber gene.

23. (Previously Presented) The cell line of Claim 21, wherein deletion of a deficient viral gene is complemented by the expression of a gene under the control of an inducible promoter.

24-40. (Cancelled).

41. (Previously Presented) The method of Claim 95, wherein said nucleotide sequence that encodes an adenovirus structural protein is operatively linked to an inducible promoter.

42-46. (Cancelled).

47. (Previously Presented) The method of Claim 95, wherein the adenovirus structural protein is adenovirus fiber protein.

48-68. (Cancelled).

69. (Previously Presented) The packaging cell line of Claim 14, wherein said cell line is selected from the group consisting of 293, A549, W163, HeLa, Vero, 21 I, 21 I A and

an epithelial cell line, wherein said cell line comprises said stably integrated nucleic acid molecule.

70-94. (Cancelled).

95. (Previously Presented) A method for producing an adenovirus particle comprising:

- 1) providing a packaging cell line according to Claim 14, and
- 2) producing said adenovirus particle.

96. (Cancelled).

97. (Previously Presented) A method for producing an adenovirus particle comprising:

- 1) providing a packaging cell line according to Claim 14, wherein said nucleic acid sequence that encodes an adenovirus structural protein encodes an adenovirus fiber protein; and
- 2) producing an adenovirus particle.

98. (Previously Presented) The method of Claim 95, wherein said adenovirus particle comprises a genome encoding an exogenous protein.

99. (Previously Presented) The method of Claim 95, wherein said exogenous protein is selected from a group consisting of a tumor-suppressor protein, a biologically active fragment thereof that has tumor-suppressor activity, a suicide protein and a biologically active fragment thereof that has activity as a suicide protein.

100. (Previously Presented) The isolated nucleic acid molecule of Claim 7, comprising a sequence of nucleotides encoding an adenovirus tripartite leader (TPL), wherein said molecule has the nucleotide sequence is set forth in SEQ ID NO: 8.

101. (Previously Presented) The isolated nucleic acid molecule of Claim 1, comprising a sequence of nucleotides encoding an adenovirus tripartite leader (TPL), wherein said molecule has the sequence of nucleotides set forth in SEQ ID NO. 8.

102-103. (Cancelled).